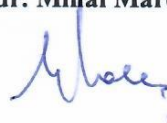


University of Life Sciences "Ion Ionescu de la Brad" Iași
 Faculty: Veterinary Medicine
 Specialty: Veterinary Medicine

Dean,
 Prof. dr. Mihai Mares



SUBJECT OUTLINE

1. Information on the programme

1.1. Higher education institution	University of Agricultural Sciences and Veterinary Medicine of Iasi
1.2. Faculty	Veterinary Medicine
1.3. Department	I – Pedotehnics
1.4. Field of study	Veterinary Medicine
1.5. Cycle of study ¹	Bachelor and Master (unitary study programme)
1.6. Specialization/ Study programme	Veterinary Medicine
1.7. Form of education	Full time

2. Information on the discipline

2.1. Name of the discipline	AGRONOMY							
2.2. Course coordinator	Assoc. Prof. Denis TOPA, PhD							
2.3. Seminar/ laboratory/ project coordinator	Assoc. Prof. Denis TOPA, PhD							
2.4. Year of study	I	2.5. Semester	2	2.6. Type of evaluation	Exam	2.7. Discipline status	Content ²	FD
							Compulsoriness ³	CD

3. Total estimated time (teaching hours per semester)

3.1. Hours per week – full time programme	2	out of which: 3.2. lecture	1	3.3. seminar/ laboratory/ project	1
3.4. Total number of hours in the curriculum	28	Out of which: 3.5. lecture	14	3.6. seminar/laboratory	14
Distribution of the time allotted					hours
3.4.1. Study based on book, textbook, bibliography, and notes					10
3.4.2. Additional documentation in the library, specialized electronic platforms and field					8
3.4.3. Preparing seminars/ laboratories/ projects, subjects, reports, portfolios and essays					8
3.4.4. Tutorials					4
3.4.5. Examinations					2
3.4.6. Other activities					
3.7. Total hours of individual study	32				
3.8. Total hours per semester	60				
3.9. Number of credits ⁴	2				

4. Prerequisites (is applicable)

4.1. curriculum-related	Not necessary
4.2. skills-related	Helpful background coursework: Undergraduate soil management/ biology and plant sciences.

5. Conditions (if applicable)

5.1. for the lecture	The course is interactive; students can ask questions regarding the content of the presentation.
5.2. for the seminar/ laboratory/ project	At practical work is required to study the materials presented in the lectures; Lab work may require clothing suitable for outdoor farm settings.

6. Specific competences acquired

Professional competences	Agronomy is an introductory crops and soils course. Topics include basic soil physical, resource conservation, growing factors, sampling and soil analysis and interpretation, soil pH and liming, cropping systems, planting practices, crop growth and development, among many others.
Transversal competences	<p>The future veterinarian must show perseverance and responsibility for the results of his work by respecting the code of professional ethics.</p> <ul style="list-style-type: none"> • He must interrelate within a work team and have the necessary skills to resolve individual and group conflicts and at the same time advocate for his continuous improvement in his area of competence. • Must be able to think of practical activities related to adapting elements of culture technology to specific conditions. • Demonstrate concern about the permanent testing of new varieties / hybrids in various vegetation conditions • Ability to continuously use resources to inform / learn / solve a given problem. • Demonstrate practical skills in identifying the productive capacity of agricultural soils / lands and provide solutions. • To establish the need for agrotechnical interventions

7. Course objectives (based on the list of competences acquired)

7.1. Overall course objective	The objective is to provide for the students the knowledge and practical abilities, to be able to determine optimum cropping system, select the most appropriate fertilization system and weed control for main crops.
7.2. Specific objectives	<ul style="list-style-type: none"> • Understand the benefits of cultivated plants in addition to supplying food • Understand the role of cultivated plants as food sources for human and animals • Understand how plants are named and classified • Understand how several crops originated and where they were domesticated • Understand the challenges to plant scientists as they try to increase our food supply • Describe and recognize plant organs • Describe soil and its components • Understand the principles of main tillage systems.

8. Content semester I

8.1. LECTURE Number of hours – 14 Soil Forming Factors/Solid Phase and Weathering/Physical Properties Soil conservation & management Growing factors (Soil-Water Relationships/Water Movement/Soil Aeration/Temperature) Tillage systems Major Crops Around the World and Romania Crop Types and Cropping Systems Crop Improvement Corn, Soybean, Sunflower & Wheat Planting Growth, Development, and Diagnostics	Teaching methods	Notes
	Lecture	One hour lecture weekly

8.2. PRACTICAL WORK Number of hours – 14 Basic Soil Science Principles Soil sampling Bulk density, Soil water stability, Soil Humidity Soil pH The 1,000 kernel (1,000 K) weight Test weight of crop seeds	Theoretical presentation of labs followed by experiments or field soil sampling	One hour session weekly
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Compulsory bibliography:

1. Electronic course and practical work support -- PPT presentation

Optional bibliography:

1. **Biology of plants**, 2005. Peter H. Raven, Ray F. Evert, Susan E. Eichhorn;
2. **Encyclopedia of soil in the environment**, vol. 3, 2005. Daniel Hillel (2005).
3. **Principles of Field Crop Production** – John Martin, Warren Leonard.

9. Corroborating the course content with the expectations of the epistemic community representatives, of the professional associations and of the relevant employers in the corresponding field

The content of the course is constantly updated to provide students with the necessary information and skills in accordance with the requirements of employers. For this, regular meetings are organized with the representatives of the association, professionals and employers and the learning process is focused on training key competencies.

10. Assessment

Type of activity	10.1. Assessment criteria	10.2. Assessment methods	10.3. Percentage of the final grade
10.1. Lecture	The notions assimilated during the lectures will be evaluated writing in the exam session.	Exams will be based on the material covered in class, homework assignments, and the reading assignments. The types of questions found on the exams will include short answer, essay, and multiple-choice.	70 %
10.2 Project presentation	Each student (or group) will make an oral presentation of 8 to 10 minutes long, using appropriate technology.	They will present, analyse, and explain issues regarding agriculture concepts and data, from their country/region - PPT	20 %
10.3. Seminar/Laboratory	Laboratory work assessment must highlight the assimilation degree (theoretical and practical) obtained by the student.	Quiz	10 %

10.6. Minimum performance standards

Minimum promotion requirements (for grade 5):

- Participation in all laboratory activities.
- Recovery, possibly with payment, of lost practical activities, with groups that have a similar theme.
- Minimum knowledge of the subject of the discipline.
- Relatively low capacity to transfer specialized information.
- Obtaining a minimum of 0.5 points for laboratory activities and 4.5 points for written work. Project presentation is mandatory.

¹ Cycle of studies- choose of the three options: Bachelor/Master/Ph.D.

² Discipline status (content)- for the undergraduate level, choose one of the options:- **FD** (fundamental discipline), **BD** (basic discipline), **CS** (specific disciplines-clinical sciences), **AP** (specific disciplines-animal production), **FH** (specific disciplines-food hygiene), **UO** (disciplines based on the university's options).

³ Discipline status (compulsoriness)- choose one of the options – **CD** (compulsory discipline) **OD** (optional discipline) **ED** (elective discipline).

⁴ One credit is equivalent to 25-30 hours of study (teaching activities and individual study).

Date
September 14th, 2021

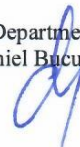
Course coordinator
Assoc. Prof. Denis TOPA, PhD



Laboratory work/seminar coordinator
Assoc. Prof. Denis TOPA, PhD



Head of the Department
Prof. dr. Daniel Bucur



September 17th, 2021

Approved by Faculty Council